

IN THE CLAIMS:

This listing of the claims will replace all prior versions and listings of claims in the application:

1. (Currently Amended) An intelligent trolley module for use in an assist system, comprising:
 - a plurality of wheels on the intelligent trolley module and configured to move the trolley module along a an overhead track;
 - an actuator on the intelligent trolley module for driving at least one of the wheels in a horizontal direction;
 - a computational node on the intelligent trolley module for controlling the actuator;
 - and
 - a communication interface on the intelligent trolley module for providing input/output digital communication between the computational node intelligent trolley module and a plurality of other computational nodes ~~other intelligent modules~~ via a common data link.
2. (Previously Presented) The intelligent trolley of claim 1 wherein the actuator comprises a gearing.
3. (Previously Presented) The intelligent trolley of claim 1 wherein the actuator comprises a motor.
4. (Previously Presented) The intelligent trolley of claim 1 wherein the computational node implements a virtual limit controlling motion of the trolley.
- Claim 5 (Canceled).
6. (Original) The intelligent trolley of claim 1 further comprising a roller.
7. (Original) The intelligent trolley of claim 1 further comprising a manually operable roller release.

8. (Original) The intelligent trolley of claim 1 further comprising an automatic roller release.

9. (Original) The intelligent trolley of claim 1 further comprising a position indicator for indexing motion of the device.

10. (Previously Presented) The intelligent trolley of claim 9 wherein the position indicator comprises a hall switch.

11. (Previously Amended) The intelligent trolley of claim 1 wherein the computational node uses odometry for monitoring the motion of the trolley.

12. (Currently Amended) An intelligent lift module for use in an assist device, comprising:

an actuator on the intelligent lift module;

a support connected to the actuator and configured to move a payload in a substantially vertical direction;

a computational node on the intelligent lift module in communication with the actuator for controlling movement of the payload; and

a communication interface on the intelligent lift module for providing input/output digital communication between the computational node intelligent lift module and a plurality of other computational nodes other modules via a common data link.

13. (Previously Presented) The intelligent lift module of claim 12 wherein the support comprises a cable.

14. (Previously Presented) The intelligent lift module of claim 12 wherein the cable is raised and lowered by a reel.

15. (Previously Presented) The intelligent lift module of claim 14 wherein the reel comprises a translating reel.

16. (Previously Presented) The intelligent lift module of claim 15 wherein the reel comprises a slidable translating reel.

17. (Previously Presented) The intelligent lift module of claim 15 wherein the reel further comprises a cam follower.

18. (Original) The intelligent lift module of claim 12 further comprising a replaceable guide unit containing a cam follower.

19. (Original) The intelligent lift module of claim 12 further comprising a position indicator.

20. (Original) The intelligent lift module of claim 18 further comprising a hall switch.

21. (Original) The intelligent lift module of claim 18 further comprising a motor encoder.

22. (Previously Presented) The intelligent lift module of claim 18 wherein the reel comprises a plurality of hall switches configured to index multiple rotations of the reel.

23. (Previously Presented) The intelligent lift module of claim 12 further comprising a virtual limit to the lift.

24. (Currently Amended) An input device for use in an assist system, comprising:
a handle for gripping; and
at least one proportional control;
wherein the input device is in communication with a computational node disposed on
a multi-function hub, wherein the proportional control when moved provides a proportional
output signal to the computational node ~~the multi-function hub~~, and wherein the
computational node ~~multi-function hub~~ passes the output signal to a plurality of other
computational nodes within the assist system via a common data link.

25. (Original) The input device of claim 24 wherein the input device comprises a pendant.

26. (Previously Presented) The input device of claim 24, wherein the output signal comprises one of an up signal to lift a payload up and a down signal to lower the payload down.

27. (Previously Presented) The input device of claim 24, wherein the proportional control comprises a shaft to rotate a magnet in the vicinity of a hall effect sensor to create the output signal.

28. (Previously Presented) The input device of claim 24, further comprising a plurality of buttons configured to be assigned specific functions.

29. (Original) The input device of claim 28 wherein the specific functions comprise stop and reset.

30. (New) The intelligent trolley of claim 1, wherein the common data link is a bus.

31. (New) The intelligent trolley of claim 1, wherein the common data link is a wireless data link.

32. (New) The intelligent lift module of claim 12, wherein the common data link is a bus.

33. (New) The intelligent lift module of claim 12, wherein the common data link is a wireless data link.

34. (New) The input device of claim 24, wherein the common data link is a bus.

35. (New) The input device of claim 24, wherein the common data link is a wireless data link.